

Original Articles

1 **The Use of Pedicled Expanded Flaps for Aesthetic Resurfacing of the Burned Face**
A series of facial burn patients is presented in which hyperexpanded chest flaps were used to resurface aesthetic units of the face. Pedicles were divided two weeks later without flap loss.

7 **The Use of Pedicled Perforator Flaps for Reconstruction of Lumbosacral Defects**
Four lumbosacral reconstructions were carried out using perforator-based flaps based on the superior gluteal artery, the lumbar artery, or an intercostal artery. The flaps proved to be large and highly reliable with wide arcs of rotation and the ability to close the donor defects primarily.

15 **Abdominal Recovery After Laparotomy and Omental Transposition Into a Grossly Contaminated Median Sternotomy Wound**
A retrospective review of abdominal wound healing compared (1) 15 septic sternotomy wounds treated with omental flaps against (2) a control group of 15 elective splenectomies. No difference was seen in post-operative peritonitis or number of days to recovery of peristalsis, NG tube removal, oral feeding, or first bowel movement.

19 **Anterior Oblique Ligament Reconstruction of the Thumb Using the Transverse Carpal Ligament: Description of a New Procedure**
A cadaver study demonstrated the feasibility of thumb anterior oblique ligament reconstruction using the transverse carpal ligament for stabilization.

24 **Fingertip Reconstruction Using Two Variations of Direct-Flow Homodigital Neurovascular Island Flaps**
Eleven fingertips and seven more proximal amputation stumps were resurfaced using two different methods of direct-flow homodigital neurovascular island flaps. No flap failures were seen, and good sensibility was achieved.

31 **Verrucous Malformations: Their Presentation and Management**
Six patients with verrucous vascular malformations were excised in single or staged procedures. With only a single recurrence over seven years, excision is seen to be superior to laser ablation or cryosurgery.

Konrad Hoekstra, MBBS
Donald A. Hudson, FRCS, MMed
A. Wayne Smith, FCS(SA)

Nathalie A. Roche, MD
Koenraad Van Landuyt, MD
Philip N. Blondeel, MD, PhD
et al

Yoav Barnea, MD
Meir Cohen, MD
Michael Giladi, MD
et al

M. W. Elmaraghy, MD, FRCSC

Huseyin Borman, MD
Tugrul Maral, MD
Mehmet Tancer, MD

Mahesh H. Mankani, MD
Craig R. Dufresne, MD, FACS

37 Prevention of Meatal Stenosis With W-Flap Glanuloplasty in Hypospadias Surgery: A Long-Term Follow-up

Three hundred fifty-six hypospadias cases repaired with incorporation of a W-flap glanuloplasty demonstrated a 0.8% meatal stenosis rate. The advantages included an anatomically located meatus, wider meatal diameter, avoidance of a circular anastomosis, a satisfactory urinary stream, and elimination of need for a stent.

42 Effect of the Delay Phenomenon in the Rat Single-Perforator-Based Abdominal Skin Flap Model

In a rat musculocutaneous, perforator-based, abdominal skin flap model, delay was effective if performed by incising the flap boundaries alone or by adding the ligation of all ipsilateral perforators except the pedicle artery.

48 The Role of Periosteum and Different Dissection Types on Callus Formation: Quantitative Analyses With Scintigraphy in a Rabbit Mandible Model

In a rabbit mandible model, callus formation progressed more rapidly the less periosteum had been stripped at the time of the initial osteotomy, confirming the beneficial effect of intact periosteum on fracture healing.

54 Secondary Venous Ischemic Injury Associated With Neutrophil Infiltration and Lipid Peroxidation: Amelioration of Injury by Cyclosporin A in a Rat Inguinal Island Flap

In a rat neurovascular island flap model, post-treatment of secondary venous ischemia with high-dose Cyclosporin A resulted in increased flap surviving area and lower MDA and MPO levels. The effect was probably a result of attenuation of neutrophil infiltration and reduction of lipid peroxidation.

Case Reports

61 Elongated Uvula With a Pleomorphic Adenoma: A Rare Cause of Obstructive Sleep Apnea Syndrome

64 Pneumomediastinum After Injection Injury to the Hand

67 A Modified Reversed Digital Island Flap Incorporating the Proper Digital Nerve

**Seyhan Çenetoğlu, MD
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Osman Latifoğlu, MD
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**O. Koray Coşkunfirat, MD
H. Seçkin Okşar, MD
H. Ege Özgentaş, MD**

**Ufuk Bilkay, MD
Naci Çelik, MD
Ülkem Bilkay, MD
et al**

**Akın Yücel, MD
Cemal Şenyuva, MD
Gülnur Andican, MD
et al**

**Hisashi Motomura, MD
Teruichi Harada, MD
Mitinari Muraoka, MD
Toshiko Taniguchi, MD**

**C. L. F. Temple, MD
R. S. Richards, MD, FRCSC
W. B. Dawson, MD, FRCPC**

**Ahmet Karacalar, MD
Cenk Şen, MD
Mesut Özcan, MD**

71 **Functional Lip Reconstruction With a Radial Forearm Free Flap Combined With a Masseter Muscle Transfer After Wide Total Excision of the Chin** Hiroshi Shinohara, MD
Motonao Iwasawa, MD
Takeshi Kitazawa, MD
Hideo Kushima, MD

74 **Malignant Fibrous Histiocytoma Arising in a Thoracotomy Scar** Sean Lille, MD
Paul Schnur, MD

78 **Metastatic Basal Cell Carcinoma of the Axilla: Report of a Case and Reconstruction With an Island Lateral Pectoral Flap** N. W. Yii, FRCS(plast)
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101 **Distally Based Superficial Peroneal Neuroadipofascial Turnover Flap for Dorsal Foot Reconstruction** Shi-Min Chang, MD, PhD
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102 **Malignant Clear Cell Hidradenoma with Giant Metastasis to the Axilla** Serkan Yıldırım, MD
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Iker Apaydin, MD
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103 **Superior and Inferior Ulnar Collateral Arteries Originating As A Common Trunk In The Arm** H. I. Canter, MD
A. Erdem, MD, PhD
C. C. Denk, MD, PhD

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Original Articles

109 Repair of Large, Anterior Palatal Fistulas Using Thin Tongue Flaps: Long-Term Follow-up of 10 Patients With Invited Discussion By Jeffrey C. Posnick, DMD, MD, FRCS(C), FACS, and Ramon L. Ruiz, DMD, MD

Ten thin anteriorly based tongue flaps were used for closure of large anterior palatal fistulas with 100% survival. One reoperation for bleeding occurred, and one recurrent fistula appeared during maxillary expansion.

M. Zeki Guzel, MD
Fatis Altintas, MD

118 Immediate Coverage of Exposed, Denuded Cranial Bone With Split-Thickness Skin Grafts

Five consecutive acutely denuded skull wounds were successfully closed by immediate burring of the outer table and skin grafting. Delaying until the formation of granulation tissue was unnecessary.

J. M. Pitkanen, MD
M. M. Al-Qattan, MD
N. A. Russel, MD

122 Long-Term Results of Tendon Transfers for Radial Nerve Palsy in Patients With Limited Rehabilitation

Long-term follow-up of 22 patients with tendon transfers for isolated radial nerve palsy demonstrated improved function in all but one. Thirteen of 17 previously employed patients returned to work following recovery.

Paul J. Skoll, FRCS, FCS(SA)Plast
Donald A. Hudson, FRCS, FCS(SA)Plast, MMed
Wikus de Jager, FCS(SA)Ortho, MMed
Martin Singer, FRCS

127 Correlation of Electrodiagnostic Findings With Subjective Symptoms in Carpal Tunnel Syndrome

A retrospective record review of 138 patients (222 hands) evaluated for carpal tunnel syndrome with nerve conduction studies (NCS) and questionnaires demonstrated that NCS data correlated more closely with severity of symptoms than with functional status.

Eun Sang Dhong, MD
Seung Kyu Han, MD
Byung Il Lee, MD
Woo Kyung Kim, MD

132 The Distally Based Superficial Sural Flap: Our Experience in Reconstructing the Lower Leg and Foot

Distally based superficial sural flaps were performed for 18 distal third and foot defects with only a single superficial necrosis resulting.

Marco Fraccalvieri, MD
Giovanni Verna, MD
Massimo Dolcet, MD
et al

140 Rotation Ligamentoplasty for the Correction of Epicanthus Inversus

Congenital epicanthus inversus was permanently corrected in seven of eight patients by rotation of the medial canthal ligament during transnasal wiring.

Ercan Karacaoğlu, MD
Erdem Tezel, MD
M. Mümtaz Güler, MD

145 **The Limitation of Primary Excision of Cicatricial Alopecia: A Report of 63 Patients**

A review of 63 patients operated for cicatricial alopecia of the scalp disclosed the clear superiority of tissue expansion over direct excision. Direct excision was satisfactory only in scars less than 10 mm in width.

F. Duteille, MD
B. Le Fourn, MD
D. Hepner Lavergne, MD
M. Pannier, MD

150 **Cartilage Shaping Using the Er:YAG Laser: Preliminary Report**

In a rabbit ear cartilage model, stripping with the Er:YAG laser resulted in controlled, progressive bending over a 10-day period, suggesting its clinical value in cartilage shaping.

Metin Görgü, MD
Meltem Ayhan, MD
Gürcan Aslan, MD
et al

155 **The Effect of Pedicle Artery Vasospasm on Microhemodynamics in Anatomically Perfused and Extended Skin Flap Tissue**

In a hamster island skin flap model, recovery from clamp-induced vasospasm was accompanied by reactive arteriolar vasodilatation in the well-perfused portion of the flap, but no vasodilatation in the extended portion of the flap. It is suggested that distal ischemic necrosis may be a result of prolonged uncompensated vasospasm in poorly perfused areas.

Reto Wettstein, MD
Robert Wessendorf, MD
Axel Sckell, MD
et al

162 **Both Dermal Matrix and Epidermis Contribute to an Inhibition of Wound Contraction**

In a swine excisional wound model, both dermal matrix and epidermal coverage inhibited wound contraction. Prompt epithelial coverage impeded contraction by reducing inflammation.

Jennifer L. Walden, MD
Habacue Garcia, MS
Hal Hawkins, MD et al

167 **Hyperbaric Oxygen Therapy in Adriamycin Extravasation: An Experimental Animal Study**

In a rat model, healing of an adriamycin-induced wound was accelerated by the use of hyperbaric oxygen administration.

Şamil Aktas, MD
Akin Savaş Toklu, MD
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Case Reports

172 **Are Triglyceride Breast Implants Really Biocompatible? With Invited Discussion By V. Leroy Young, MD**

S. Papanastasiou, FRCSEd
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177 **Reconstruction of Hip Abduction Using Free Muscle Transplantation: A Case Report and Description of the Technique**

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181 Total Tongue Reconstruction With Free Functional Gracilis Muscle Transplantation: A Technical Note and Review of the Literature Levent Yoleri, MD
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193 The Compound Sternal Flap for Laryngeal Reconstruction Vladimir Shur, MD
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199 When Is Surgical Treatment Not Appropriate for Morphea? Nandan V. Kamath, MD
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202 Reconstruction of a Tibial Defect With Microvascular Transfer of a Previously Fractured Fibula Sheel Sharma, MD
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207 Clinical and Scientific Considerations in Leech Therapy for the Management of Acute Venous Congestion: An Updated Review Adam B. Weinfeld, MD
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213 Rhapsody in Greek William D. Morain, MD

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214 Re: Transsacral Usage of an Island TRAM Flap for Sacral Defects John P. Cederna, MD

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214 A New Tool to Eliminate Hyperpigmentation in Liposuction Scars Carlo Gasperoni, MD
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215 Pediatric Plastic Surgery in a Day Hospital: Use of Propofol and a Laryngeal Mask Francesco D’Andrea, MD
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216 **A Giant Recurrent Pyogenic Granuloma of the Thumb** Akin Yücel, MD
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218 **Re: Soft Tissue Reconstruction of Sole and Heel Defects with Free Tissue Transfers** Mansoor S. Khan, MBBS, MRCS, AFRCS

219 **Microphthalmia With Linear Skin Deficiency Syndrome Accompanied by Cleft Lip and Palate** Ufuk Bilkay, MD
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220 **Simultaneous Use of a Tissue Expander and Skin Graft in Scalp Reconstruction** Masamitsu Kuwahara, MD
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220 **Pacinian Corpuscle Hyperplasia Coexisting With Dupuytren's Contracture** Nalan Akyürek, MD
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222 **Palliative Amputation for a Peculiar Case of Malignant Melanoma of the Lower Limbs** Francesco D'Andrea, MD
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223 **Idiopathic Calcinosis of the Scrotum** Yavuz Demir, MD
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224 **The Effects of Oxidized, Regenerated Cellulose on Diced Cartilage Xenografts: An Experimental Study** Nilgün Markal Ertaş, MD
Sema Hürçümenoğlu, MD
Ömer Beşaltı, PhD
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226 **Re: Treatment of Painful Neuromas: A Case Report** Marcel F. Meek, MD
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227 **Announcements**

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Special Article

229 **Cleft Lip in the Talmud With Invited Discussion by Fred Rosner, MD, FACP** Melvyn Westreich, MD
Samuel Segal, MD

The author makes the case that cleft lip represents the "Sandal" deformity described in the Talmud.

Original Articles

240 Elevating the Island: The Simplest Method of Delaying the TRAM Flap

Fifty-five pedicled TRAM flaps were delayed by pre-elevating the island 7–10 days prior to transfer, leaving the deep inferior epigastric pedicle intact. No total flap necrosis and only 3.6% partial necrosis resulted after subsequent transfer.

Edward Towzik, MD, PhD
Slawomir Mazur, MD, PhD
Tadeusz Witwicki, MD
et al

244 Elective Plastic Surgery in a Jehovah's Witness: A Case Series and Review of the Literature

Three Jehovah's Witnesses underwent complex surgical operations with the aid of supportive procedures, including monitoring, volume replacement, erythropoietin, and vitamin/nutritional supplements. Legal and historical issues are reviewed.

Robert F. Centeno, MD
Charles D. Long, MD
Mark S. Granick, MD

252 A Prospective Blinded Evaluation of Nerve Conduction Velocity Versus Pressure-Specified Sensory Testing in Carpal Tunnel Syndrome

A new apparatus, the Pressure-Specified Sensory Device, was found to be as sensitive and specific as nerve conduction velocity (NCV) testing in the diagnosis of carpal tunnel syndrome in 79 patients. It was significantly less painful for the patient than NCV.

Robert A. Weber, MD
John A. Schuchmann, MD
James H. Albers, MD
Jaime Ortiz, CHT

258 Two New Intramedullary Implant Designs for Phalanx Fixation in Digital Replantation: An Experimental Study

Two new intramedullary implants, a two-sided asymmetric screw and a hook-trap device provided rapid and rigid fixation for digital replantation when tested in 40 cadaver phalanges.

Aycan Kayıkçıoğlu, MD
Sebat Karamürsel, MD
Emin Mavili, MD
Abdullah Keçik, MD

264 Correction of Crooked Nail Deformity by Modified Osteoplastic Reconstruction

Ten crooked nail deformities were treated by modified osteoplastic reconstruction, elevating a dorsally based volar skin flap and placing an iliac bone graft beneath. All nails were lengthened and straightened postoperatively.

Yoonho Lee, MD, PhD
Sungtack Kwon, MD, PhD
Kyoungho Ko, MD

269 Endoscope-Assisted Parotidectomy for Benign Parotid Tumors

Sixteen endoscope-assisted parotidectomies were performed through 7-cm incisions. The combination of magnification and enhanced illumination was valuable in avoiding facial nerve injury.

Sin-Daw Lin, MD
Chih-Cheng Tsai, MD
Chung-Sheng Lai, MD
et al

274 Free Flap Closure in Complex Congenital and Acquired Defects of the Palate

Six patients with congenital and acquired palatal defects underwent free flap coverage using rectus abdominis flaps and radial forearm flaps with and without bone. One patient required revision and another underwent placement of Branemark osseointegrated implants into the transferred bone.

Andrew E. Turk, MD
James Chang, MD
A. Ebbie Soroudi, MS
et al

280 Combined Microvascular Anastomosis: Experimental and Clinical Experience

A combined microanastomotic technique is presented, incorporating a continuous suture with interrupted ties. Studies of the rat aorta and inferior vena cava demonstrated more rapid execution with this technique, and 150 clinical cases demonstrated no technique-related failures.

Tsan-Shiun Lin, MD
Yuan-Cheng Chiang, MD

284 Reverse Fasciosubcutaneous Flap Versus Distally Pedicled Sural Island Flap: Two Elective Methods for Distal-Third Leg Reconstruction

Twenty-five soft tissue defects of the lower third of the leg and heel were resurfaced with the fasciosubcutaneous reverse and sural reverse flaps, resulting in six minor complications. The fasciosubcutaneous flap was more suitable for large defects.

Antonio Bocchi, MD
Stefano Merelli, MD
Andrea Morellini, MD
et al

292 Sequential Segmental Neuromuscular Stimulation Reduces Fatigue and Improves Perfusion in Dynamic Graciloplasty

Using a canine dynamic graciloplasty model for urinary neosphincter, sequential segmental neuromuscular stimulation (SSNS) was compared to conventional, single-channel, continuous stimulation. SSNS proved superior in muscle endurance and blood perfusion.

Erik D. H. Zonnevijlle, MD
Naveen N. Somia, MD, PhD
Gustavo Perez Abadia, MD
et al

298 Effect of Surgical Denervation on the Viability of Inferior Epigastric Neurovenous Flaps in the Rat

In a rat neurovenous inferior epigastric flap model, acute denervation produced a significant decrease in surviving flap area, whereas chronic denervation demonstrated no survival difference from control flaps.

Ahmet Karacalar, MD
Hülya Öztürk, MD
Mesut Özcan, MD

305 A Rat Musculocutaneous Flap Model: The Biceps Femoris Musculocutaneous Flap

Based on the caudal femoral-popliteal vascular pedicle, the biceps femoris musculocutaneous flap is described in the rat. The flap has a consistent perforating vessel, supports a large skin island, and is at no risk for autocannibalization because of its dorsal position.

Mustafa Akyürek, MD
Tunc Şafak, MD
İlker Manavbaşı, MD
Abdullah Keçik, MD

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313 Congenital Volkmann–Lesser Ischemic Contracture of the Upper Limb Ram Silfen, MD
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318 Congenital Pressure Necrosis of the Forearm in a Newborn Infant With Invited Discussion by Joseph Upton, MD Arun K. Gosain, MD
Forrest O. Moore, MD
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329 A Method for Minimizing Donor Site Complications of the Radial Forearm Flap Adam R. Kolker, MD
Christopher J. Coombs, FRACS
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332 Whither Subatmospheric Pressure Dressing? Steven E. Greer, MD

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337 Subcutaneous Emphysema of Hand and Forearm After High-Pressure Injection of Air During Scuba Diving Halil I. Canter, MD
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338 Hypospadias Repair: Collaboration Between Urologist and Plastic Surgeon Yvonne L. Karanas, MD
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339 A New Concept for the Treatment of Postburn Contracture of the Elbow Vishwa Prakash
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339 Foreign Body Infection of Methicillin-Resistant *Staphylococcus aureus* in a Sternal Wound Tomoharu Kiyosawa, MD, PhD
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Naoto Yamamoto, MD
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340 Elastofibroma Dorsi Reha Yavuzer, MD
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Tarık Çavuşoğlu, MD
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341 Antihelical Folding for Pinnaplasty Using One Posterior Cartilage Score and Horizontal Mattress Sutures Peter Sylaidis, FRCS
David Gault, FRCS

343 Dermoid Cyst at the Suprasternal Notch Mustafa Yilmaz, MD
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343 Cleft Lip and Dental Eruption

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345 Lasers in Aesthetic Surgery

Martha S. Matthews, MD, FACS

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349 Characteristics of Women With Cosmetic Breast Augmentation Surgery Compared With Breast Reduction Surgery Patients and Women in the General Population of Sweden With Invited Discussion by Tina S. Alster, MD

Jon P. Fryzek, PhD
Elisabete Weiderpass, MD
Lisa B. Signorello, ScD
et al

A retrospective questionnaire study of 1,369 women with cosmetic breast implants, 2,211 with prior breast reduction, and 49,262 with neither of these demonstrated that those with implants were more likely to smoke, to have a lower body mass index, to have undergone a miscarriage or induced abortion, and to have had fewer live births than the others. The data reflect that women who undergo cosmetic breast surgery tend to have distinct characteristics.

357 Using the Pulsed Dye Laser to Influence Scar Formation After Breast Reduction Surgery: A Preliminary Report

P. G. Shakespeare, PhD
E. Tiernan, FRCS(Plast)
A. E. Dewar, PhD
J. Hambleton, MPhil

An examination of 11 patients undergoing breast reduction demonstrated that early scars showing tiny transverse vessels were destined to become hypertrophic and wide. Use of the Pulse Dye Laser disrupted this vessel pattern and inhibited further hypertrophic change.

369 The Use of External Ultrasound Combined With Superficial Subdermal Liposuction

Carlo Gasperoni, MD
Marzia Salgarello, MD

Using the superwet technique, 30 patients underwent external ultrasound application, followed immediately by superficial liposuction and then deep liposuction. The superficial subdermal areas pretreated with external ultrasound produced an oilier and less bloody aspirate than in those areas without ultrasound.

374 Hazards of Piercing and Facial Body Art: A Report of Three Patients and Literature Review

Benedikt J. Folz, MD
Burkard M Lippert, MD
Christoph Kuelkens, MD
Jochen A. Werner, MD

Three complications of body piercing are presented, including perichondrial auricular abscess, nasal alar granulomatous perichondritis, and stud embedding of the lower lip.

382 Endoscopic-Assisted Harvest of the Temporoparietal Fascial Flap

Nine microtia patients underwent endoscope-assisted harvesting of the temporoparietal fascial flap through two 2-cm incisions. Two patients required wider intraoperative exposure to achieve hemostasis.

Akihiko Takushima, MD

Hirotaka Asato, MD

Kiyonori Harii, MD

386 Extraoral vs. Intraoral Distraction Osteogenesis in the Treatment of Hemifacial Microsomia

Twelve hemifacial microsomia patients treated with an extraoral distraction device were compared to ten treated with an intraoral device. Although the intraoral method was more socially convenient, the extraoral device permitted greater elongation, better vector control, and more accurate gonial angle preservation.

Adi Rachmiel, DMD, PhD

Dror Aizenbud, DMD

Stavros Eleftheriou, DMD

et al

395 Reliability of Island Flaps Raised After Superficial and Deep Burn Injury

Rat epigastric island flaps were raised and resutured 4 days after administration of a superficial or deep burn to the flap site. There were no significant differences in flap survival between burned and unburned flaps.

Huseyin Borman, MD

Tugrul Maral, MD

Beyhan Demirhan, MD

Mehmet Haberal, MD, FACS

399 The Free Musculocutaneous Tensor Fascia Lata Flap as a Backup Procedure in Tumor Surgery

Nine free TFL flaps were successfully transferred for reconstruction after recurrent tumor resections of the chest and abdominal walls. The two-team procedures resulted in no functional deficits, and all donor sites were closed primarily or skin grafted.

C. Heitmann, MD

M. Pelzer, MD

H. Menke, PhD

G. Germann, PhD

405 An Anatomic Examination of the Suprascapular Flap

A cadaver injection study demonstrated a highly variable branching pattern of the suprascapular artery, confirming that a "suprascapular flap" is not practicable.

Takeshi Kitazawa, MD

Kiyoshi Matsuo, MD, PhD

Tetsuji Moriizumi, MD, PhD

Yoshinori Hataya, MD

408 The Effect of Blood Supply in Muscle and an Elevated Muscle Flap on Endogenous Tissue-Engineered Bone by rhBMP-2 in the Rat

Implantation of recombinant human bone morphogenetic protein-2 into rat latissimus dorsi muscle and muscle pouches resulted in heterotrophic osteoinduction. The difference in bony tissue between the two groups suggested that the blood supply is an important factor in promoting osteoinduction by rhBMP-2.

Kenji Kusumoto, MD

Kazuhide Bessho, DDS, DMSc

Kazuma Fujimura, DDS, DMSc

et al

415 **Contribution of Conventional Axial Computed Tomography (Nonhelical), in Conjunction With Panoramic Tomography (Zonography), in Evaluating Mandibular Fractures**

Ian F. Wilson, MD
Adam Lokeh, MD
Charles I. Benjamin, MD
et al

In a series of 66 mandibular fractures in 39 patients, axial computed tomography demonstrated two parasympheseal fractures and several instances of undiscovered comminution not seen on Panorex. The data added by axial computed tomography could have changed an operative plan based solely on Panorex in 44% of the cases.

Case Reports

422 **A Unique Case of Secondary Microvascular Glansplasty: The Last Genitoreconstructive Frontier?** J. Joris Hage, MD, PhD

427 **Critical Leg Ischemia Resulting From Interruption of Collaterals by Harvest of the Rectus Abdominis Free Flap: Endovascular Salvage** Keith Hodge, MD
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431 **Pregnancy as a Tissue Expander in the Repair of a Massive Ventral Hernia** Eric T. Elwood, MD
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434 **The Sandwich Technique for Closure of a Palatal Fistula** Ismail Kuran, MD
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438 **Docetaxel (Taxotere) Extravasation: A Report of Five Cases With Treatment Recommendations** Jeffrey A. Ascherman, MD
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442 **Giant Plexiform Neurofibroma of the Back** Maurice Y. Nahabedian, MD
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446 **Multiple-Digit Onychomycosis: A Simple Surgical Cure** Maurice Y. Nahabedian, MD

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454 **Sclerosing Lobular Hyperplasia of the Breast After Reduction Mammoplasty** W. Glenn Lyle, MD
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Khalid Khan, MB, BCh, FRCS,
FRCS(Plast)

467 Rhomboid Flap for Surgery of the Scalp With or Without Expansion: An Experimental Study
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Original Articles

471 One-Stage Immediate Breast and Nipple–Areolar Reconstruction With Autologous Tissue I: A Preliminary Report
Seven women with early breast cancer underwent skin-sparing mastectomy and immediate breast reconstruction using de-epithelialized TRAM flaps. A full-thickness areola graft from the specimen was combined with a CV flap on Zone II of the TRAM flap to complete the single-stage reconstruction.
Donald A. Hudson, FRCS
David M. Dent, ChM, FRCS
Dirk Lazarus, FCS(SA)

477 Brachytherapy: Reconstructive Options and the Role of Plastic Surgery
Nineteen patients received brachytherapy and reconstruction for cancer of the upper and lower extremities and trunk. Despite local catheter irradiation of 45–50 Gy (Ir192) beginning 5 days after flap closure, all flaps survived with only 10% complications. Local recurrences were seen in 42%.
Haluk Duman, MD
Gregory R. D. Evans, MD
Gregory Reece, MD
et al

481 Total Reconstruction of the Alar Cartilages With a Partially Split Septal Cartilage Graft

In 22 secondary rhinoplasties, deficient lower lateral cartilages were present. Tip support was supplied with a hockey stick-shaped septal graft partially split to create double domes. All gained greater tip projection, and three reported functional improvement.

Luiz Carlos Ishida, MD
Jorge Ishida, MD
Luis Henrique Ishida, MD
et al

485 Philtral Construction by Composite Skin–Muscle Rotation and Orbicularis Oris Muscle Advancement in Secondary Cleft Lip Deformity

Ten secondary unilateral cleft lip repairs were performed using a hinged muscle flap from the medial side to augment the cleft philtral ridge. Final results demonstrated a more symmetric philtrum and cupid's bow.

Usio Haramoto, MD
Takashi Kamiji, MD
Satoshi Takagi, MD
et al

491 Sentinel Node Biopsy in Melanoma Using Technetium-99m Rhenium Colloid: The London Experience

Fifty-six consecutive patients with stage 1b or 2 melanoma underwent sentinel node biopsy assisted by preoperative lymphoscintigraphy using 99m-technetium rhenium colloid or filtered sulfur colloid. Scans identified sentinel nodes in 55 of 56 patients (18 in unpredicted locations), and 12 were found to be positive.

C. L. F. Temple, MD
C. G. Scilley, FRCSC
C. J. Engel, FRCSC
et al

500 An Experimental Study of Skin Flap Associated With Muscle: Is Muscle Nourishment Possible Through the Musculocutaneous Perforators? With Invited Discussion by Thomas J. Krizek, MD

A rat flap model with both muscle and skin based on the inferior superficial epigastric vessels demonstrated that muscle may survive by reverse flow through the musculocutaneous perforators when elevated with an axial skin flap.

Sükrü Yazar, MD
Oguz Çetinkale, MD
Osman Senel, MD
et al

509 Crossover Innervation After Digital Nerve Injury: Myth or Reality?

Norman Weinzweig, MD, FACS

In a retrospective review of 74 sharp epineural digital nerve repairs in 54 patients, there was no significant difference in final 2-point discrimination between unilateral and bilateral repairs. Crossover innervation did not appear to influence long-term outcome after digital neurorrhaphy.

515 Overexpression of Transforming Growth Factor Beta-2 and Its Receptor in Rhinophyma: An Alternative Mechanism of Pathobiology

TGF- β 2 and TGF- β II receptor immunoreactivity staining of rhinophyma tissue was stronger than that in normal skin, confirming overexpression of this fibrogenic protein and its receptor in rhinophyma tissue. The data support the hypothesis that fibrosis plays an important role in the pathobiology of rhinophyma.

Lee L. Q. Pu, MD, PhD
Paul D. Smith, MD
Wyatt G. Payne, MD
et al

520 Thrombogenic Effects of a Nonthrombin-Based Fibrin Sealant Compared With Thrombin-Based Fibrin Sealant on Microvenous Anastomoses in a Rat Model

Although high concentrations of thrombin are known to be harmful at the site of a microvenous anastomosis, use of a nonthrombin-based fibrin sealant was no different from controls when applied to a microvenous anastomosis in a rat flap model.

David B. Drake, MD
Brent C. Faulkner, MD
Lester R. Amiss Jr, RN
et al

525 Patterns of Radial Dysmorphology With the VACTERL Association in the Adriamycin-Exposed Prenatal Rat

The spectrum of upper limb deformities seen in adriamycin-exposed prenatal rats closely paralleled that seen in the human VACTERL association of multiple anomalies, suggesting a reliable embryological model for further study of the VACTERL deformity.

Adam R. Kolker, MD
Christopher J. Coombs, FRACS
John G. Meara, MD, DMD
et al

Case Reports

531 Occult Craniocerebral Injuries From Dog Bites in Young Children

A. Corde Mason, MD
David D. Zabel, MD
Ernest K. Manders, MD

535 Using the Ilizarov External Fixation Device for Skin Expansion

Alexander Lerner, MD
Yehuda Ullmann, MD
Haim Stein, MD
Isaac J. Peled, MD

538 Bilateral Eyelid Edema: Cutis Laxa or Blepharochalasis?

A. Braakenburg, MD
J.-P. A. Nicolai, MD, PhD

541 A Vascularized Osteocutaneous Fibular Free Flap for Reconstruction of a Complex Injury of the Foot

Yoon-Kyu Chung, MD, PhD
Joon Pio Hong, MD
Sang-Yoon Kang, MD
et al

544 The Full-Thickness Retroangular Flap

Naoshige Iida, MD
Noboru Ohsumi, MD
Yoshiaki Tsutsumi, MD
Mamoru Tonegawa, MD

550 Secondary Epispadias Repair With Rectus Abdominis Musculocutaneous Flap

Mustafa Yilmaz, MD
Haluk Vayvada, MD
Adnan Menderes, MD
Ali Barutcu, MD

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554 A Guide to Establishing the Risk for Breast Cancer in the Plastic Surgery Patient

Karen A. Gronau, MD, MSc
John L. Semple, MD, MSc, FRCSC, FACS

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560 **Staged Closure of Complicated Bronchopleural Fistulas** Andrew E. Turk, MD
Yvonne L. Karanas, MD
Walter Cannon, MD
James Chang, MD

565 **An Improved Design for Vacuum Tube Drains** Oren Lapid, MD
Yuval Kreiger, MD
Ronen Glesinger, MD
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567 **For Whom the Bell Tolls** William D. Morain, MD

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568 **Re: Nonsurgical Delay of Cutaneous Flaps Using the Flash Lamp Pumped Pulsed Dye Laser** M. M. Al-Qattan, FRCSC

568 **Reply** G. Aslan, MD
N. Karaçal, MD
M. Görgü, MD
B. Erdogan, MD

568 **Re: *Aeromonas* Species Isolated From Medicinal Leeches** Ethem Guneren, MD
Murat Hokelek, MD, PhD
Cafer Eroglu, MD
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569 **Re: Increased Axonal Regeneration Through a Biodegradable Amniotic Tube Nerve Conduit: Effect of Local Delivery and Incorporation of Nerve Growth Factor/Hyaluronic Acid Media** Marcel F. Meek, MD
J. Henk Coert, MD
Peter H. Robinson, MD, PhD, FRCS

569 **Different Approaches in Extreme Nasal Septum Deviation** Sergio Brongo, MD
Giuseppe Ferraro, MD
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570 **Axillary Reduction Mammaplasty** Yhelda Felicio, MD

Book Review

572 **Manual of Sclerotherapy** Brian M. Kinney, MD, FACS

573 **Announcements**

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Original Articles

575 Outcomes in Breast Reduction Surgery **Ramin A. Behmand, MD**
De-Hong Tang, PA
David J. Smith, Jr. MD

A prospective series of 69 women undergoing reduction mammoplasty was evaluated pre-operatively and post-operatively with quality-of-life and psychological testing. Whereas pre-operative physical health was rated poorer than control patients, significant improvement was noted in all areas nine months post-operatively with health status similar to controls.

581 Prefabrication of Combined Composite (Chimeric) Flaps in Rats With Invited Discussion by Geoffrey G. Hallock, MD **Atay Atabey, MD**
Edward McCarthy, MD
Paul Manson, MD
Craig A. Vander Kolk, MD

A rat chimeric flap with four different tissues was successfully prefabricated by wrapping a fascial graft and local muscle flap around the saphenous and superficial inferior epigastric pedicles, adding an ear cartilage graft, and implanting the structure subcutaneously. Re-elevation demonstrated 86% and 100% survival at six and twelve weeks, respectively.

589 The Use of Serial Tissue Expansion in Pediatric Plastic Surgery With Invited Discussion by Bruce S. Bauer, MD **Donald A. Hudson, FRCS**
Dirk Lazarus, FCS(SA)
Ram Silfen, MD

Serial tissue expansion with 63 expanders was performed on 12 children for reconstruction of giant nevi and burn deformities. Complication rates for the first to fourth expansions were 4%, 20%, 18% and 0%, respectively.

595 Management of Lawnmower Injuries to the Lower Extremity in Children and Adolescents **Detlev Erdmann, MD**
Ben Lee, MD
Craig D. Roberts
L. S. Levin, MD

Sixteen pediatric lower-extremity lawnmower injuries required early debridement and bony fixation in all cases, with half sustaining amputations. Three of five long bone fractures underwent external fixation, and five free flap transfers were required.

601 New Eyebrow Lift Technique Using a Semiautomatic Suturing Device (Maniceps) for Patients With Facial Paralysis **Atsushi Niu, MD, DDS**
Kazuki Ueda, MD
Mutsumi Okazaki, MD
Akira Momosawa, MD

Thirteen facial paralysis patients underwent fascia lata suspension browlift through two small post-hairline incisions with the aid of a semiautomatic suturing device.

607 Tuberous Breast Deformity: Principles and Practice **John G. Meara, MD, DMD**
Adam Kolker, MD
Glenn Bartlett, FRACS
et al

Sixteen patients with 23 tuberous breast deformities were surgically treated in accordance with an algorithm based on a three-tiered anatomic classification system.

612 The Cross-Leg Soleus Muscle Flap

Nine large lower-extremity defects were closed with cross-leg soleus flaps. The flap is advantageous when the recipient vessels are too damaged for a free flap, and its donor site is superior to that of the conventional cross-leg flap.

Chris Ladas, FCS (Plast)
Roger Nicholson, FCS (Plast)
Vernon Ching, FCS (Plast)

616 Lateral–Dorsal Neurovascular Island Flaps for Pulp Reconstruction

Seventeen acute traumatic digital pulp losses were reconstructed with two types of homodigital lateral–dorsal neurovascular island flaps. Mean static two-point discrimination was 5.2 and 9.3 mm in the two types, and 71% had no loss of interphalangeal motion.

Chien-Tzung Chen, MD
Fu-Chan Wei, MD, FACS

623 Reducing Postoperative Morbidity After the Insertion of Gold Weights to Treat Lagophthalmos

A review of 76 facial paralysis patients with prior gold lid loading demonstrated a 12% revision rate for inadequate weighting and a 16% extrusion rate. All extrusions and most migrations of the implant occurred in the absence of suture fixation.

A. Misra, MRCS
R. Grover, FRCS
S. Withey, FRCS (Plast)
et al

629 The Effects of Hyperglycemia on Skin Graft Survival in the Burn Patient

A study of 74 burn patients indicated that skin graft take was significantly decreased in the presence of hyperglycemia and/or gram-positive bacterial counts $\geq 10^5$ per gram of tissue.

Arian Molavi, MD
Kris Andrews, MD
Stephen Milner, MB, BS, BDS, FRCS (Ed)
et al

633 Application of Artificial Dermis Graft to Correct a Depression After Tissue Resection

Seven patients with contour depression following tissue resection underwent implantation of 5-mm thick sheets of atelocollagen sponge. No allergic or infectious complications occurred, and significant residual thickness of the implants was noted on MRI at eight months after placement.

Mitsuo Hatoko, MD, PhD
Masamitsu Kuwahara, MD
Aya Tanaka, MD
et al

Case Reports

641 End-to-Side Neurorrhaphies of the Ulnar and Median Nerves at the Wrist: Report of Two Cases Without Sensory or Motor Improvement

Aycan Kayıkçıoğlu
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644 Phlegmasia Cerulea Dolens of the Upper Extremity

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Eric T. Elwood, MD
Fred Roberts, PA-C

647 Severe Extensor Tendon Attrition and Multiple Tendon Ruptures Resulting from Kienböck's Disease

S. Ramkumar, MBBS
I. C. Josty, FRCS
P. J. Sykes, FRCS

651 Three Different Types of Congenital Lacrimal Sac Fistulas Chiaya Toda, MD
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Kounosuke Tsujiguchi, MD
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654 A Rare Craniofacial Cleft: Bilateral Tessier No. 5 Cleft Accompanied by No. 1 and No. 6 Clefts Ufuk Bilkay, MD
Hakan Gundogan, MD
Cunyet Ozek, MD
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658 Bilateral Congenital Pits of the Upper Lip Figen Özgür, MD
Gökhan Tunçbilek, MD

662 Pilar Leiomyoma: A Case Report and Review of the Literature J. D. Latoni, MD
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665 The Evolution of Velopharyngeal Imaging Peter D. Will, MD
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Elizabeth G. McFarland, MD
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676 Re: Breast Reduction Outcome Study Anne Klassen
Tim Goodacre

676 Reply Cynthia L. Mizgala, MD, FRCS(C), FACS
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677 Re: Endoscopic Harvest of the Rectus Abdominis Muscle Stephen Southern, FRCS (Plast)
Venkat Ramakrishnan, FRACS

677 Perioperative Use of the Endoscope in Cleft Palate Surgery: A Preliminary Report A. Raurell, FRCS (Ed)
S. J. Southern, FRCS (Plast)
O. M. Fenton, FRCS (Eng)

678 Sight Lost After Lower Lid Blepharoplasty Mario A. Treilles, MD, PhD

679 The Use of *Hirudo medicinalis* in Nipple–Areolar Congestion Ethem Güneren, MD
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Hayati Akba, MD
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681 Human Skin Allograft for Difficult Extremity Wounds W. Bradford Rockwell, MD
Stephen P. Daane, MS
Jan L. Pierce, CTBS

681 **Tumor Necrosis factor- α and Lipopolysaccharides Induce Differentially Interleukin 8 and GRO- α Expression in Human Endothelial Cell Line EA.hy926**

Yao-Hua Song, MD, PhD
Michael M. Neumeister, MD
Arian Mowlavi, MD
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